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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,565	06/24/2005	Masashi Otsuki	Q88777	6424

23373 7590 07/31/2007  
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EXAMINER
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KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
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1755

MAIL DATE	DELIVERY MODE
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07/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/540,565

Applicant(s)

OTSUKI ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/24/05</u> | 6) <input type="checkbox"/> Other: ____  |

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The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

WO 2000/33410, cited in the information disclosure statement, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The US equivalent to WO 2000/33410, US patent 6,475,679, has been considered.

The Japanese references cited in the information disclosure statement have been considered with respect to the provided English abstracts and/or relevancy given in the supplied Search report.

The disclosure is objected to because of the following informalities: The specification teaches a formula  $P=N$  core where there are three  $R^1$  attached to the phosphorous atom; a formula  $P=Y$  core where there are two  $R^2$  attached to the phosphorous atom and a benzene ring with six  $R^6$  attached thereto. The specification teaches each  $R^1$ ,  $R^2$  or  $R^6$  can have a different definition. This definition is counter to the accepted method of writing formulas since conventionally when the radical has the same variable, it is the same. Thus conventionally all three  $R^1$  would be same. It is suggested to use label each R group on the benzene ring or P with a

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different number to correspond to the conventional formula formats. Appropriate correction is required.

Claims 1 and 5 are objected to because of the following informalities: These claims teach a formula  $P=N$  core where there are three  $R^1$  attached to the phosphorous atom; a formula  $P=Y$  core where there are two  $R^2$  attached to the phosphorous atom and a benzene ring with six  $R^6$  attached thereto. The claims teach each  $R^1$ ,  $R^2$  or  $R^6$  can have a different definition. This definition is counter to the accepted method of writing formulas since conventionally when the radical has the same variable, it is the same. Thus conventionally all three  $R^1$  would be same. It is suggested to use label each R group on the benzene ring or P with a different number to correspond to the conventional formula formats. Appropriate correction is required.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-5 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-5 of copending Application No. 10/540,558. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The body of these sets of claims are identical and the only difference is the intended use of the additive. This intend use does not patentably distinguish the two additives from each.

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Claims 1-5 of this application conflict with claims 1-5 of Application No. 10540,558. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,955,867. Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the patented claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a

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monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O and P. Thus the patented claim suggests the additive claimed in this application.

Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 10 of U.S. Patent No. 7,229,719. Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the patented claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O, S and P. Thus the patented claim suggests the additive claimed in this application.

Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 10/482,804. Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the copending claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O, S and P. Thus the copending claim suggests the additive claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of copending Application No. 10/482,810. Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the copending claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O, S and P. Thus the copending claim suggests the additive claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 and 49 of copending Application No. 10/494,936. Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the copending claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O, S and P. Thus the copending claim suggests the additive claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/540,837.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the copending claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O, S and P. Thus the copending claim suggests the additive claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/537,297. Although the conflicting claims are not identical, they are not patentably distinct from each other because the phosphazene in the copending claim includes that claimed in this application since it can have the formula  $R^1, R^2, R^3-P=N-X$ , where each R is attached to P and each can be a halogen or a monovalent substituent and X is an organic group which can contain at least one element selected from the group consisting of C, Si, N, O, S and P. Thus the copending claim suggests the additive claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.



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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 6,475,679 or WO 00/33410.

U.S. patent 6,475,679 is the national stage application for WO 00/33410 and thus is the translation for WO 00/33410.

These references teach an additive comprising a phosphazene having the formula  $(RO)_3P=N-SO_2-N=P(OR')_3$ , where R and R' are each an alkyl, thus RO is an alkoxy. Reference example 4 teaches R is ethyl and thus the references teach ethoxy attached to the phosphorous atom. This formula falls within the claimed formula since  $N=P(OR')_3$  is a monovalent substituent. The references teach the claimed additive.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/39314.

U.S. patent 6,955,867 is the national stage application for WO 01/39314 and thus is the translation for WO 01/39314.

The examples in these references teach an additive comprising a phosphazene having the formula  $R_3P=N-PR_2=O$ , where R is ethoxy. This formula falls within the claimed formula since  $PR_2=O$  is a monovalent substituent. The references teach the claimed additive.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/39314.

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This reference teaches an additive comprising a phosphazene derivative having the formula  $(R^1Y^1)(R^2Y^2)(R^3Y^3)P=N-X$ , where  $Y^1, Y^2$  and  $Y^3$  each can be a single bond;  $R^1, R^2$  and  $R^3$  each are a halogen, such as fluorine, or a monovalent substituent, such as an alkoxy group, an alkyl group, an acyl group or an aryl group, and  $X$  is an organic group such as one having the formula  $PR_2=Z$ , where  $Z$  can be carbon containing organic groups and  $R$  can be a halogen or a monovalent substituent. Thus the reference suggests additive containing a phosphazene derivative having the formula  $R^1R^2R^3P=N-X$ , where  $R^1, R^2$  and  $R^3$  each are a halogen, such as fluorine, or a monovalent substituent, such as an alkoxy group, an alkyl group, an acyl group or an aryl group, and  $X$  is an organic group such as one having the formula  $PR_2=Z$ , where  $Z$  can be carbon containing organic groups and  $R$  can be a halogen or a monovalent substituent. Thus the reference suggests the claimed additive.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/86746.

U.S. patent 7,229,719 is the national stage application for WO 01/86746 and thus is the translation for WO 01/86746.

The examples in these references teach an additive comprising a phosphazene having the formula  $R_3P=N-PR_2=Z$ , where  $R$  is ethoxy and  $Z$  is a divalent group or element or oxygen. This formula falls within the claimed formula since  $PR_2=Z$  is a monovalent substituent. The references teach the claimed additive.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/86746.

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This reference teaches an additive comprising a phosphazene derivative having the formula  $(R^1Y^1)(R^2Y^2)(R^3Y^3)P=N-X$ , where  $Y^1, Y^2$  and  $Y^3$  each can be a single bond;  $R^1, R^2$  and  $R^3$  each are a halogen, such as fluorine, or a monovalent substituent, such as an alkoxy group, an alkyl group, an acyl group or an aryl group, and X is an organic group containing at least one of C, Si, N, P, O and S (col. 11, line 55-col. 12, line 30). Thus the reference suggests additive containing a phosphazene derivative having the formula  $R^1R^2R^3P=N-X$ , where  $R^1, R^2$  and  $R^3$  each are a halogen, such as fluorine, or a monovalent substituent, such as an alkoxy group, an alkyl group, an acyl group or an aryl group, and X is an organic group such as one having the formula  $PR_2=Z$ , where Z can be carbon containing organic groups and R can be a halogen or a monovalent substituent. Thus the reference suggests the claimed additive.

Claims 1, 4 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 6,452,782 or 6,469,888.

The examples in these references teach a non-aqueous electrolyte electric double layer capacitor comprising a positive and negative electrode and a non-aqueous electrolyte comprising a support salt and a phosphazene derivative having the formula  $R_3P=N-PR_2=O$ , where R is ethoxy. This formula falls within the claimed formula since  $PR_2=O$  is a monovalent substituent. The amount of the phosphazene derivative in the examples is 2 vol%, 20 vol%, 50 vol% or 80 vol%. The references teach the claimed additive and capacitor.

Claims 1-4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,452,782 or 6,469,888.

This reference teaches a non-aqueous electrolyte electric double layer capacitor comprising a positive and negative electrode and a non-aqueous electrolyte comprising a support

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salt and a phosphazene derivative having the formula  $(R^1Y^1)(R^2Y^2)(R^3Y^3)P=N-X$ , where  $Y^1, Y^2$  and  $Y^3$  each can be a single bond;  $R^1, R^2$  and  $R^3$  each are a halogen, such as fluorine, or a monovalent substituent, such as an alkoxy group, an alkyl group, an acyl group or an aryl group, and  $X$  is an organic group containing at least one of C, Si, N, P, O and S (col. 11, line 55-col. 12, line 30). Thus the reference suggests additive containing a phosphazene derivative having the formula  $R^1R^2R^3P=N-X$ , where  $R^1, R^2$  and  $R^3$  each are a halogen, such as fluorine, or a monovalent substituent, such as an alkoxy group, an alkyl group, an acyl group or an aryl group, and  $X$  is an organic group such as one having the formula  $PR_2=Z$ , where  $Z$  can be carbon containing organic groups an  $R$  can be a halogen or a monovalent substituent. The taught amount of phosphazene derivative is 2-20 vol% ('782) or 2-80 vol% ('888). Thus the reference suggests the claimed additive and capacitor.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk  
July 27, 2007

  
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